

Missouri Department of Natural Resources
Regulatory Impact Report
In Preparation for Proposing
An Amendment to 10 CSR 20-8.300

Division/Program: Division of Environmental Quality / Water Protection Program

Rule number: 10 CSR 20-8.300 **Rule title:** Manure Storage Design Regulations

Type of rule action: Amendment to Existing Rule

Nature of the rulemaking: Align the regulation to remove the obligation to obtain construction permits for applicable facilities and to make minor edits to improve rule language

Approval of the Completed Regulatory Impact Report

John Madess

Program Director

10/8/15

Date

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Applicability: Pursuant to Section 640.015 RSMo, “all rulemakings that prescribe environmental conditions or standards promulgated by the Department of Natural Resources...shall... be based on the regulatory impact report....” This requirement shall not apply to emergency rulemakings pursuant to section 536.025 or to rules of other applicable federal agencies adopted by the Department “without variance.”

Determination: The Missouri Department of Natural Resources has determined this rulemaking prescribes environmental conditions or standards and verifies that this rulemaking is not a simple unvarying adoption of rules from federal agencies. Accordingly, the department has produced this regulatory impact report which will be made publicly available for comment for a period of at least 60 days. Upon completion of the comment period, official responses will be developed and made available on the department’s web page prior to filing the proposed rulemaking with the Secretary of State. Contact information is at the end of this regulatory impact report.

1. Describe the environmental conditions or standards being prescribed.

This amendment retains and clarifies existing specific design criteria for the construction of manure management systems and removes the construction permitting requirement for these facilities. The rulemaking is in response to the 2013 legislative revision to section 644.051.1 RSMo. The requirement for a construction permit will remain for the construction of earthen basins in accordance with the statute. Individual clarifications include: 1) the improvement and addition of several definitions throughout the document, 2) clarifications regarding the items required in an application for engineering review, 3) changes of the name of the Division of Geology and Land Survey to Missouri Geological Survey, and 4) the removal of nutrient management plan requirements and other documents now required for operating permits that are required by 10 CSR 20-6.300 Confined Animal Feeding Operations.

This rulemaking prescribes new environmental conditions or standards. The rule will require animal waste lagoons to be designed to exclude stormwater runoff when possible. The rule is changed to set berm widths for various fill heights. The rule specifies that fill around pipes through berms shall be compacted to prevent seepage. Pipes must be valved and located at a point of minimum fill. There is a minimum lagoon drawdown depth of two feet to protect the lagoon liner. The rule will also require an operation and maintenance plan for major components of animal waste management systems and safety must be considered as part of lagoon design.

The existing rule requires the installation of clean outs for gravity pipes for every one-hundred fifty feet of pipe and the rule will propose reducing this to every three-hundred feet.

2. A report on the peer-reviewed scientific data used to commence the rulemaking process.

No peer-reviewed scientific data was necessary to develop this amendment. The amendment removes construction permitting requirements and clarifies rule language. The proposed new requirements involve the application of common design and construction practices related to agricultural lagoons and piping.

3. A description of the persons who will most likely be affected by the proposed rule, including persons that will bear the costs of the proposed rule and persons that will benefit from the proposed rule.

The rule applies to new or expanding concentrated animal feeding operations (CAFOs). CAFOs are defined in 10 CSR 6.300, which provides an applicability chart listing the thresholds numbers of animals over which operations are considered to be CAFOs. The owners and operators of CAFO facilities without earthen basins are expected to benefit from the proposed amendments because they will no longer need to apply for and receive construction permits from the department for proposed expansions or new facilities. The clarifications to the rule will provide a benefit because the rule will be better organized and more easily understood. The proposed new requirements involve accepted construction and design practices that are currently employed.

4. A description of the environmental and economic costs and benefits of the proposed rule.

This rule establishes the design criteria for animal waste management systems at CAFOs. Animal wastes are high in nutrients and proper design of these facilities is aimed at minimizing the risk that these wastes will enter the environment and cause environmental impacts.

The new requirements involve typical construction and design practices and will result in minor additional compliance costs. Most of the proposed changes clarify existing requirements and are not expected to affect compliance costs. The amendment results in a minor savings because new and expanding CAFOs are no longer required to obtain a construction permit prior to construction unless the project involves the construction of earthen basins. Construction permit reviews will focus on facilities planned with earthen basins.

5. The probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenue.

This proposed rule will not have a significant effect on State revenue. The rule excludes most projects from construction permitting and the associated fee each year and this will also reduce the hours of engineering staff time spent on reviewing these permit applications. The construction permit fee for each project is currently \$1,000 for projects with design flows of less than 500,000 gallons per day or \$3,000 for projects with design flows equal to or greater than 500,000 gallons per day.

6. A comparison of the probable costs and benefits of the proposed rule to the probable costs and benefits of inaction, which includes both economic and environmental costs and benefits.

Section 643.051 RSMo was revised in 2013 to eliminate the requirement that new or expanding concentrated animal feeding operations obtain a construction permit from the department unless the project involves the construction of an earthen basin. Inaction would result in the continuing situation in which the rule is in conflict with the statute. The department does not expect significant economic or environmental costs or benefits associated with this revision.

7. A determination of whether there are less costly or less intrusive methods for achieving the proposed rule.

The department is not aware of a less costly or intrusive method for achieving the goals of the proposed rule. Elimination of the construction permit requirement for new or expanding confined animal feeding operations not involving the construction of earthen basins can only be done by amendment of the rule. The same is true of the proposed rule clarifications.

Regarding the proposed requirements related to lagoon designs, the department is not aware of any other ways to assure that these structures function reliably and properly. The proposed language related to lagoon designs includes assigning top widths for various fill heights, excluding stormwater runoff when possible, specifying that berm fill around pipes be compacted to prevent seepage, requiring valves on all pipes going through berms, locating pipes at a point of minimum lagoon fill, establishing a minimum lagoon drawdown depth of two feet to protect the lagoon liner, requiring an operations and maintenance plan for all animal waste management system components, and that safety aspects need to be considered as part of the design.

8. A description of any alternative method for achieving the purpose of the proposed rule that were seriously considered by the department and the reasons why they were rejected in favor of the proposed rule.

The department is not aware of any alternative method for achieving the purpose of this proposed amendment.

9. An analysis of both short-term and long-term consequences of the proposed rule.

The department is not aware of any difference between the short-term and long-term consequences of this proposed rulemaking. The costs and benefits in the short-term are the same as in the long-term.

10. An explanation of the risks to human health, public welfare or the environment addressed by the proposed rule.

The purpose of the rule is to provide a design guide for the construction of animal waste management systems at CAFOs. The requirements in this rule are focused on appropriate design so that these wastes are properly handled. Manure and wastewater have the potential to contribute pollutants, such as nitrogen and phosphorus, organic matter, sediments, pathogens, hormones, and ammonia to the environment. The environmental impacts resulting from mismanagement of wastes include, among others, excess nutrients in water (such as nitrogen and phosphorus), which can contribute to low levels of dissolved oxygen (fish kills), and decomposing organic matter that can contribute to toxic algal blooms.

11. The identification of the sources of scientific information used in evaluating the risk and a summary of such information

No scientific information was used to evaluate the risks associated with this rulemaking.

12. A description and impact statement of any uncertainties and assumptions made in conducting the analysis on the resulting risk estimate.

This rulemaking was initiated to address a change in statute, to clarify and improve the rule, and to add specific lagoon design considerations. Risks are minimized through the use of effective design requirements. The rule will be made consistent with Missouri Statute. The department is not aware of any uncertainties and assumptions associated with the proposed rule revisions.

13. A description of any significant countervailing risks that may be caused by the proposed rule

The department is not aware of any countervailing risks associated with the proposed amendment.

14. The identification of at least one, if any, alternative regulatory approaches that will produce comparable human health, public welfare or environmental outcomes.

Inaction would affect the regulated community and regulators by allowing a continuing conflict between rule and statute. Clarification of rule language provides regulatory certainty to the permittees. Regarding the addition of specific requirements related to lagoon design, the department is not aware of any other regulatory mechanisms that would provide equivalent human health and public welfare protections.

15. Provide information on how to provide comments on the Regulatory Impact Report during the 60-day period before the proposed rule is filed with the Secretary of State.

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16. Provide information on how to request a copy of comments or the web information where the comments will be located.

Comments will be posted to the Water Protection Program Rule Development web page.
<http://dnr.mo.gov/env/wpp/rules/wpp-rule-dev.htm>